

Abstract of the Disclosure

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A MOS transistor with a controlled threshold voltage, comprises a SOI which includes a substrate composed of a semi-conducting material, a single crystal layer composed of a semi-conducting material and an insulating layer interposed between the substrate and the single crystal layer.

5 The single crystal layer is formed therein with a source region, a drain region and a surrounded region surrounded by the source region and the drain region. The surrounded region includes a depletion layer having a composition surface which is in contact with the insulating layer. The MOS transistor comprises

10 an EIB-MOS transistor of which the substrate is adapted to be applied with a voltage of a first polarity for inducing charges of a second polarity over the composition surface of the surrounded region.

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